

Notice of Allowability

Application No.

09/771,239

Examiner

Zachary A. Davis

Applicant(s)

LOTSPIECH ET AL.

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment received 23 May 2005.
2. ☒ The allowed claim(s) is/are 1,3,5-7,12-17,20-27,29 and 30.
3. ☒ The drawings filed on 24 April 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER

EXAMINER'S AMENDMENT

1. An amendment was received on 23 May 2005. Claims 1, 5, and 12 have been amended. Claims 4, 8-11, 18, 19, and 28 have been canceled. No claims have been added. Claims 20-27 were allowed in the previous Office action. Claims 1, 3, 5-7, 12-17, 29, and 30 remain under examination in the present application.

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John Rogitz on 02 August 2005.

The application has been amended as follows:

IN THE CLAIMS:

REPLACE Claim 1 with the following rewritten claim:

1. A method for identifying ~~and subsequently taking corrective action based thereon~~ and/or disabling at least one traitor receiver with at least one associated unique, compromised decryption key in a broadcast encryption system, comprising:
 - receiving a set of subsets derived from a tree defining leaves, each leaf representing a respective receiver;
 - identifying at least one traitor subset from the set of subsets as containing at least one leaf representing a candidate traitor receiver;
 - using the traitor subset, undertaking at least one of identifying and ~~subsequently taking corrective action based thereon and/or~~ disabling the traitor receiver; and
 - determining whether the traitor subset represents at least two traitor receiver candidates, and if so, dividing the traitor subset into two child sets, wherein the act of identifying or disabling includes encoding plural subsets of the set of subsets with a false key.

Allowable Subject Matter

3. Claims 1, 3, 5-7, 12-17, 20-27, 29, and 30 are allowed.
4. The following is an examiner's statement of reasons for allowance:

Reasons for allowance of Claims 20-27 and 12-17 were set forth in the previous Office action. Claims 1, 3, 5-7, 29, and 30 have been allowed for similar reasons, set forth herein.

Independent Claim 1 is directed to a method for disabling traitor receivers in a broadcast system. The closest prior art, Schwenk, US Patent 6222923, also discloses a method for disabling dishonest receivers. Schwenk specifically teaches the limitations of Claim 1 including receiving a set of subsets derived from a tree defining leaves, each of which represents a receiver; identifying a traitor subset as containing at least one candidate traitor receiver; and identifying and disabling the traitor receiver. Schwenk also teaches dividing the traitor subset into child subsets. However, Schwenk does not explicitly teach or suggest encoding subsets with a false key. Therefore, the claims are allowable over the cited prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571) 272-3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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